

In the specification on page 8, beginning on line 26, please amend the following four paragraphs as follows:

Fig. 1 illustrates the robotic arm 10 onto which the preferred probe would be mounted. Robotic arm 10 may move in degrees of freedom as indicated by arrows 40, in addition to independent placement in the x-y plane. A plurality of probe changer assemblies 20 may be engaged to and disengaged from robotic arm 10 repeatedly as required. Mounted permanently to tool probe changer assembly 20 are two or more rigid shafts 30, onto which the preferred probe would be installed and permitted to slide by means of low-friction bushings. Fig. 2 illustrates the preferred probe of the invention, comprising signal probe tip assembly 100, conductive ground electrode assembly 110, probe bracket 400, sliding non-conductive bushings 212, mounting collars 50, and tool changer assembly 20 attached to the probe via compression springs 35 and rigid shafts 30.

The components of the preferred probe tip assemblies of the invention are shown in Figs. 3, 4(a)-(e), and 5(a)-(d) which show the preferred but illustrative dimensions. Fig. 3 shows the components of the probe tip assembly which is comprised of the following: signal probe tip assembly 100 with two brass mounting screws 401; ground ~~probe tip~~ electrode assembly 110 (preferably made of brass) with two brass mounting screws 402; probe assembly body bracket 400 (preferably made of brass); and two non-conductive bushings 212.

Figs. 4(a) and (b) show the preferred signal probe tip assembly 100, comprising a coaxial cable interface 109 which mates with a corresponding connector electrically connected back through the robotic arm to the testing

instrumentation by coaxial cable and male/female connectors. The coaxial connector's ground is electrically connected to the ground flange **102**, and with the probe assembly body ~~bucket~~ bracket **400** through physical connection and through the two brass mounting screws **401** and thus with ground ~~sleeve~~ electrode assembly **110** through its mounting onto the probe assembly body bracket **400** with the two brass mounting screws **402**. The coaxial connector's signal is electrically connected with signal probe tip **104**, which is insulated from the ground flange **102**. The probe assembly body bracket **400**, has support holes which can be engaged by non-conductive bushings **212** to physically support the probe tip assembly. The preferred shape of signal probe tip **104** is shown in Figs. 4(c)-(e).

Turning now to Figs. 5(a)-(d), these show a rectangular ~~conductive~~ ground ~~nib~~ electrode assembly **110**, which in use is physically connected with the probe assembly body bracket **400** such that base plate **116** is physically and electrically connected to probe assembly body bracket **400**, creating a conductive ground path through sleeve **112** to ground nib/tip **114**. The dimensions of the assemblies **100** and **110** are arranged so that both nib **114** and signal probe tip **104** preferably protrude from sleeve **112** by the same distance. A 60-degree point is preferred for the ground nib. Alternatively, signal probe tip **104** can be longer in order to permit it to be compliant when contacting a board under test.

Beginning on page 10, line 11, please amend the paragraph as follows:

In order to overcome the difficulties inherent in making the signal and ground electrodes exactly the same length, as shown in Fig. 6, ~~the~~ an outer

electrode **510** can be configured as an axially spring-loaded conductor member in order to provide compliance. Alternatively, as shown in Fig. 7, the probe may be configured such that the entire connector assembly **520** is resilient rather than a single conductor. This results in movement of the signal electrode **521** instead of the ground electrode (not shown). Compliance is provided by having connector assembly **520** move along metal pins **522** in the upward direction as indicated by the arrow **535**, while contacting conductive washers **523** and conductive short-throw wave washer type springs **524**. Movement is limited by conductive stops **525** attached to base bracket **530** by conductive mounting screws **526**. Short-throw wave washer type springs **524** are preferred in that these lessen the introduction of excess inductance into the system.